INDIRA GANDHI MEDICAL COLLEGE, SHIMLA

No. HFW/ME (MCS)G(3)2013-(MRU)- Dated:

TENDER NOTICE

Properly sealed tenders are invited for the supply of Machinery & Equipments for establishment of MRU at Indira Gandhi Medical College, Shimla so as to reach in this office on or before 16.03.2015 upto 1 PM thereafter no tender shall be entertained. The Tenders will be opened on same day at 3 PM in the presence of the prospective tenderers who may wish to remain present.

Tender form containing specifications, terms and conditions can be purchased from the office of the undersigned on any working day between 10 AM to 5PM upto 13.03.2015 at the cost of Rs. 1000/- on counter and Rs. 1050/- by Registered post, which is non refundable (only M.O/ TMO will be entertained sufficiently in advance to avoid the risk of late dispatch of the tender forms. Delay in submission of tender form due to late receipt of MO/TMO will be the entire responsibility of the tenderers). The tenders sent by post or courier shall be entertained only if these are actually received by the specific date and time.

The tender document can also be downloaded from the website www.igmcshimla.org, however, such bidder shall be required to pay the cost of the tender document in the form of DD in favour of the Principal IGMC Shimla alongwith their bid.

The tender must be accompanied with an earnest money of **Rs.1,00,000/- (Rupees One Lac)** only in the shape of FDR duly pledged in the name of PRINCIPAL, INDIRA GANDHI MEDICAL COLLEGE, SHIMLA. The tenders without earnest money or short or not in form specified above will be rejected straightway.

In case any date mentioned above happens to be a holiday, the next day will be considered as due date.

Principal
IGMC, Shimla

No. As above Dated:-

Copy forwarded for information and necessary action to:-

1. The Director, Information & Public Relation Department, Himachal Pradesh, Shimla-2 alongwith six spare copies for wide publicity in the leading News papers in English and Hindi.
2. The Director Medical Education & Research, Himachal Pradesh, Shimla-9.
3. The Controller of Stores, Himachal Pradesh, Shimla-1.
4. All the Members of Departmental Purchase Committee.
5. Interested tenderers.
6. Notice Board.

Principal
IGMC, Shimla

TENDER DOCUMENT

M/S_____ **Receipt No._____**

_____ **Date: - _____**

FOR

SUPPLY OF

MACHINERY & EQUIPMENTS FOR ESTABLISHMENT OF Multi Disciplinary Research Lab

AT IGMC, SHIMLA

DUE ON 16.03.2015

LAST DATE

FOR RECEIPT OF BID

UPTO 1 PM ON 16.03.2015

BID OPENING ON

16.03.2015 AT 3:00 PM

PRINCIPAL

INDIRA GANDHI MEDICAL COLLEGE,

SHIMLA

TEL No. 0177- 2883214, 2807682

COST OF TENDER DOCUMENT

AT COUNTER RS. 1000/-

BY POST RS. 1050/-

ANNEXURE- C

INDIRA GANDHI MEDICAL COLLEGE, SHIMLA, HIMACHAL PRADESH

S.NO. OF TENDER : _____

FILE NO. :

Name of the party in whose :
Favour the Tender form has
been issued _____

(SEAL OF THE OFFICER)

To

The Principal,
Indira Gandhi Medical College
Shimla, HP -171001

Dear Sir,

1. I am /We are hereby submit our tender for the_____

2. I/WE am/are enclosing herewith the FDR. No…… dated……. for Rs.1,00,000/- duly pledged in favour of the "Principal IGMC Shimla" towards EMD. (TENDERS NOT ACCOMPANIED WITH EMD/BID SECURITY ALONGWITH THE TECHNICAL BID SHALL BE SUMMARILY REJECTED).

3. I /We have gone through all terms and conditions of the tender documents before submitting the same.

4. I/We hereby agree to all the terms and conditions, stipulated by the IGMC, in this connection including demonstration, delivery, installation and warranty and penalty etc. Quotations for each group are being submitted under separate covers, and sheets and shall be considered on their face value.

5. I/We have noted that overwritten entries shall be deleted unless duly cut & re-written and initialed.

6. Tenders are duly signed (No thumb impression should be affixed).

7. I/We undertake to sign the contract/agreement, if required, within 15 (Fifteen days) from the date of issue of the letter of acceptance, failing which our/my security money deposited may be forfeited and our/my name may be removed from the list of suppliers at the IGMC Shimla-1.

NOTE: ALL TERMS AND CONDITIONS SUCH AS TAXES ETC, HAS BEEN INDICATED IN THE QUOTATIONS FAILING WHICH IT WILL BE PRESUMED THAT ALL THE RATES ARE INCLUSIVE OF ALL TAXES AND OTHER TERMS AND CONDITIONS ARE ALSO AS PER YOUR REQUIREMENTS.

Yours faithfully,

Signature of Tenderer(s)
full Address

WITNESS_____

WITNESS_____

WITNESS_____

1. Instructions to Bidders

1.1 Bids are invited, for and on behalf of Principal, IGMC Shimla from established, reputed and experienced manufacturers or their authorized dealers/representatives for purchase of machinery and equipment/material for establishment of MRU at IGMC, Shimla as per the enclosed Technical Specifications. **(Annexure-A).**

1.2 Bidders are requested to study the tender document and terms & conditions carefully. Submission of tender shall be deemed to have been done after careful study and examination of the tender document with full understanding of its implications.

1.3 The scope of work shall include Supply, Installation, Commissioning, & Satisfactory Demonstration. This will also include testing, packing, transportation, scheduling of transportation, transit insurance, delivery at sites, unloading, storage, job site storage, insurance, installation and any other services associated with the delivery of the equipment and materials providing warranty of services and operation and maintenance of other related equipment / items required for complete installation. The successful bidder will assume full responsibility of the complete system until final acceptance.

1.4 It will be imperative on each bidder to fully acquaint himself with all the local conditions and factors which would have any effect on the performance of the System. No request for the change of price, or time, schedule of delivery of stores shall be entertained after the purchase on account of any local condition or factor.

1.5 The bidders may have a survey including a site visit before furnishing the quotations. They have to apply for permission in this regard to the Principal IGMC Shimla. The Principal, IGMC Shimla will give such permission in writing, but the expenses, in connection with the visit and surveys etc., shall be borne by the bidders themselves.

1.6 The bidders will not form a part of the cartel and put in supporting quotations for some other company. This will debar the company for participating in other tenders floated or to be floated in by the purchaser. The authorities can compare the prices of other Bidders L2, L3 etc. also with the prices quoted in other tenders for same products and in case of discrepancy suitable action will be initiated.

1.7 No Gratification Clause: The bidders will give an undertaking that they will not try to gratify any person or use any other unfair means involved in the purchase of the quoted equipment. This will also debar the company for participating in other tenders floated or to be floated in by the purchaser and suitable action will be initiated against such defaulters.

1.8 Non Blacklisting Certificate: All the bidders will give an undertaking on non judicial Stamp paper duly attested that neither they nor their principals or the manufacturers have been blacklisted by any State / Central Government Departments/other organisations.

1.9 The bidders shall also be required to submit the copies of PAN and income tax returns for the last three year along with the copy of TIN/ copy of registration of their firms with appropriate authority.

1.10 All the correspondences shall be addressed to the Principal, IGMC Shimla.

1.11 The Bid Documents are not transferable and the cost of the documents is not refundable under any circumstances.

1.12 Information regarding installations in Government & Premier institutions in India and satisfactory service and maintenance may be forwarded with all the details for verification

2. Bid Security/Earnest Money

2.1 Bid Security/EMD amount should be enclosed along with the Technical Bid for an amount of Rs.1,00,000/- in the shape of FDR duly pledged in the name of "Principal, IGMC Shimla", failing which the tenders will be out rightly rejected. Bid Security/EMD, if already deposited against other tenders, shall not be adjusted against this tender.

2.2 The "Bid Security/Earnest Money ", in case of unsuccessful Bidders, shall be retained by the Purchaser, up-to a maximum period of One year from the date of opening of the Bids or till the finalization of the tender, whichever is later. The Bid security shall be refunded to the unsuccessful tenderers on their written request. No interest will be payable by the Purchaser on the Bid Security/EMD.

2.3 The Bid Security/Earnest Money shall be forfeited ;

a) If a Bidder withdraws his bid during the period of bid validity specified by the Bidder in the Bid; or

b) In the case of the finally selected Bidder, if the Bidder fails;

i) to sign the Contract in accordance with Clause 13; or

ii) to furnish Performance Guarantee in accordance with Clause 5.8 or

iii) if, at any stage, any of the information/declaration is found false.

2.4 Bid security/Earnest Money in respect of the finally selected Bidder(s) will be discharged upon the Bidder(s) executing the Contract, and furnishing the Performance Guarantee, pursuant to Clause-5.8.

3. Bidder's Qualification

The "Bidder" as used in the tender document shall mean one who has signed the Bid Form. The Bidder may be either the manufacturer of the equipment/machinery/material for which prices are quoted on the Price Schedule or his duly authorized representative, in which case, he shall submit a certificate of authority as per **Annexure- B.** All necessary certificates and documents shall be furnished by the manufacturer/ representative of the firm. Manufactures/companies should authorize only one distributor for the State/for this particular tender and such specific authorization to this effect should be accompanied with tender document.

Only one bid from a manufacturer firm shall be accepted and in case the manufacturer firm itself apply in the tender process, the bid of the authorized representative shall not be considered.

4. Procurement and Submission of Tender Document

4.1 The non-transferable Tender Document will be sold at counter on payment of tender fee of Rs.1,000/- (Rupees One Thousand only non refundable) through cash or MO/TMO or demand draft or by post Rs.1050/- by MO/TMO or Demand Draft payable at Shimla drawn in favour of the "Principal IGMC Shimla".

IMPORTANT: IN CASE THE TENDER DOCUMENTS ARE DOWNLOADED FROM THE WEBSITE:- THE BIDDERS MAY DOWNLOAD THE TENDER DOCUMENTS DIRECTLY FROM THE WEBSITE AVAILABLE AT WWW.IGMCSHIMLA.ORG IN SUCH CASE, THE BIDDERS ARE REQUIRED TO SUBMIT THE TENDER COST FEE OF RS.1,000/-(NON-REFUNDABLE) BY WAY OF SEPARATE DEMAND DRAFT MENTIONEING TENDER FEE ON BACK OF BANK DRAFT DRAWN IN FAVOUR OF PRINCIPAL, INDIRA GANDHI MEDICAL COLLEGE, SHIMLA AND THE SAME SHOULD ESSENTIALLY BE ENCLOSED ALONGWITH THE TECHNICAL BID. THE BIDDERS SHOULD SPECIFICALLY SUPERSCRIBE, "DOWNLOADED FROM THE WEBSITE" ON THE TOP LEFT CORNER OF THE OUTER ENVELOPE CONTAINING TECHNICAL BID& PRICE BID SEPARATELY. IN NO CASE, THE TENDER COST FEE SHOULD BE MIXED WITH EMD AMOUNT. THE TENDERS NOT FOLLOWING THE ABOVE PROCEDURE WILL BE SUMMARILY REJECTED.

4.2 The non-transferable tender document can be obtained from the Office of Principal IGMC Shimla on or before 13.03.2015 on any working day 10.00 AM to 05.00 PM.

4.3 The sealed bids will be accepted upto 16.03.2015 till 1.00 p.m. in the office of the Principal IGMC Shimla.

4.4 The Technical Bids will be opened on 16.03.2015 at 03.00 p.m. in the office of the Principal IGMC Shimla. The bidders or their authorized representatives may present, if they so desire.

4.5 After evaluation of the Technical Bids and the technical presentation, the short listed bidders will be intimated accordingly.

4.6 The Financial bids of the short listed bidders will be opened in the Office of the Principal IGMC Shimla in the presence of prospective bidders/their authorized representatives, if any. (The date of opening of financial bids will be communicated to the technically successful bidders separately).

Note :- The forwarding letter as at **Annexure C** and other relevant documents as per check list duly signed should invariably be returned alongwith the quotation furnished, failing which the tender shall be rejected.

5. Bid Requirements

5.1 The College invites two part Bids from eligible suppliers/bidders. The two part bid shall consist of Part-I Technical Bid and Part-II Financial Bid. Technical and Financial Bids for each Machinery/Equipment at Annexure-A should be submitted in two separate sealed envelopes super scribed "Technical Bid" and "Financial Bid" respectively. The technical bid would be opened first. The Financial bid would be opened only in the case of those bidders who qualify and meet requisite parameters for technical evaluation. Further the

a) Technical Bid shall comprise the following and to be submitted alongwith following documents-

i) Manufacturers' Authorization Form (Annexure -B)

ii) Forwarding letter (Annexure-C)

iii) Bidders particulars (Annexure-E)

iv) Bid Form (Annexure -F)

v) Earnest Money Deposit

vi) Proforma of Guarantee for supply of spares during the post warranty period (Annexure -G)

vii) Bidder's profile (Annexure-H)

viii) Any other certificates/undertaking as per check list

b) Financial Bid in one cover. **(Annexure-D).** Separate Financial Bid shall be submitted in respect of each equipment.

5.2 Bidders are required to submit all relevant documents as per check list, brochures, authority letters etc. with the technical offer of the concerned equipment and separate sealed envelope for each equipment should be submitted.

PLEASE NOTE NO PRICE/ COST SHOULD BE INDICATED IN THE TECHNICAL BID. TENDERS SUBMITTED WITHOUT FOLLOWING THE TWO BID SYSTEM PROCEDURE WILL BE SUMMARILY REJECTED.

5.3 Both the Technical Bid cover and Financial Bid cover prepared as above are to be kept in a single sealed cover super-scribed with Tender Number.

5.4 The cover thus prepared should also indicate clearly the name and address of the Bidder.

5.5 Each copy of the tender should be a complete document and should be bound as a volume. Different copies must be bound separately.

5.6 The sealed cover as mentioned at Clause 5.3 above shall be deposited with the Principal IGMC Shimla.

5.7 The Bidder must quote for the equipment with all items and quantities as listed in Annexure-A. **The bidder is required to quote only one model of the equipment**. The bid is liable to be rejected in case more than one model is offered.

5.8 The finally selected Bidder(s) will be required to furnish Security amount for Contract Performance equal to 10% of the Contract Price, on award of Contract as per the prescribed Performa, in the shape of Bank Guarantee from any scheduled Indian Bank or FDR duly pledged in favour of the Principal, IGMC, Shimla which shall be valid till warranty period. Failure to furnish security for the performance of contract, in time, would also entail forfeiture of EMD.

5.9 Bids not accompanied by EMD and Bids from representatives without letter of Authority from the manufacturers will be summarily rejected.

5.10 Telex/Fax bids, bids received through e-mail and incomplete bids will be summarily rejected.

5.11 Bidders should enclose, alongwith the Technical Bid of their offers, the full details including proposed configuration of offers with full documentation, descriptive literature/leaflets supplementing the description and point out any special feature of their system. All documentation is required to be in English.

5.12 The bid shall contain no interlineations, erasures or overwriting except as necessary to correct errors made by the Bidder, in which case such corrections shall be initialled by the person or persons signing the bid.

5.13 All pages of the Bid being submitted must be signed and sequentially numbered by the Bidder and a certificate may be provided on the covering letter indicating the number of pages submitted along with the bid.

5.14 All information in the offer must be in English. Information in any other language must be accompanied by its authenticated translation in English. Failure to comply with this may render the offer liable to be rejected. In the event of any discrepancy between the offer in a language other than English and its English translation, the English translation will prevail.

5.15 The bidder must give an undertaking that the offered equipment's have not been supplied any where at a less rate than offered rate in this tender.

5.16 The bidder must submit the list of installation of similar nature of equipment's and also submit the copy of latest supply order alongwith satisfactory performance report.

6. Period of Validity of Bids

Bids shall remain valid for One year from the date of bid opening (price bid) prescribed by the Purchaser unless otherwise prescribed in other terms and conditions of this tender document. The Purchaser may reject a bid valid for a shorter period.

7. Purchaser's Right to accept any Bid and to reject any or all bids

The Purchaser reserves the right to accept any bid and to annul the tender process and reject all bids at any time, without assigning any reason, prior to award of Contract, without thereby incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the grounds for the Purchaser's action.

8. Opening of Bids by Purchaser

8.1 The bids will be opened in the presence of Bidders/representatives who choose to attend on the scheduled date and time as mentioned. The Bidders/ representatives who are present shall sign a register evidencing their attendance. The Bidder's representatives shall furnish letter of authority from their principal to attend the bid opening. Financial bids of only those Bidders, whose bids are found technically suitable/qualified (after the presentation, demonstration etc., if any) will be opened. The decision of the sub-committee on technical suitability shall be final and shall not be open for discussion.

The bidders who do not qualify the technical evaluation shall be informed separately and their EMD and unopened financial bid shall be returned after award of the contract.

9. Scrutiny of Bids

9.1 The College will examine the bids to determine whether they are complete, whether any computational errors have been made, whether required EMD has been furnished, whether the documents have been properly signed, and whether the bids are generally in order.

The College may waive any minor infirmity, nonconformity or irregularity in a bid that does not constitute a material deviation and that does not prejudice or affect the relative ranking of any Bidder as a result of the technical and financial evaluation.

9.2 Prior to the detailed evaluation, the College will determine whether each Bid is acceptable qualitatively, is generally complete and is substantially responsive to the Bid Documents. For the purposes of this determination, a substantially responsive Bid is one that conforms to all the terms, conditions and specifications of the Bid Documents without material deviations, objections, conditionalties or reservations. A material deviation, objection, conditionality or reservation is one (i) that affects in any substantial way the scope, quality of performance of the Contract; (ii) that limits in any substantial way and /or is inconsistent with the Bid Documents or the college's rights or the successful Bidder's obligations under the Contract; or (iii) whose rectification would unfairly affect the competitive position of other Bidder's who are presenting substantially responsive Bids.

9.3 Arithmetical errors, if any, will be rectified on the following basis: If there is a discrepancy between the unit price and the total unit price as declared in the Price Schedule the unit price shall prevail and the total price shall be corrected. If there is a discrepancy between words and figures, the amount in words will prevail. If the supplier does not accept the correction of the errors, its bid will be rejected.

10. <u>Price Bid</u>

The prices may be quoted in **INR** only. All prices mentioned should be FOR destination at IGMC Shimla. Prices shall be quoted separately for each equipment and in a separate envelope. The bidders are required to quote the following prices :

a) Cost of core equipment including accessories as detailed in the specifications with 3 years warranty;

b) Cost of CMC per annum for post warranty period for 5 years. CMC shall also cover accessories supplied with the main equipment.

c) Cost of turn key job, if required in the technical specifications.

d) Buy back offer wherever applicable.

e) Cost of Consumables wherever applicable.

The price comparison shall be made on the basis of cost of main machinery/equipment/material alongwith its accessories, post warranty CMC, cost of Turnkey job and buy back offer wherever applicable and cost of consumables, wherever applicable.

It shall be noted that the number of test as depicted in Annexure-A have been worked out on approximation and shall not be treated as final and may vary depending upon the future circumstances. However, it shall be binding on the selected bidders to supply the reagents/kits/consumables as per actual requirement from time to time on the quoted/negotiated prices for subsequent eight years after installation of equipment's meaning

thereby that rates shall be freezed and shall be applicable for subsequent eight years for which the supplier shall have to submit an undertaking to this effect. Hence bidder shall quote the rates after careful consideration of above facts.

10.1 The bidder shall indicate the prices on prescribed PRICE BID PROFORMA at **Annexure-D, Annexure-D-1 and Annexure-D-2** of the tender document. The Proforma should be duly signed & sealed by their authorized signatory/ies. Financial Bids not given in Proforma will be rejected out rightly.

10.2 The prices of machinery/equipment quoted by the Bidder and accepted by IGMC Shimla shall hold good till the completion of the works or satisfactory installation of Machinery/equipment and no additional claims will be admissible on account of any price variation or fluctuation in market rates.

10.3 Payments made consequent to any notified change in sales tax and other statutory levies (both increase and decrease) shall be to the Purchaser's account. For such claims of variation, the Bidder shall produce the Government notification as documentary evidence. Price variation due to any other cause shall be on Bidder's account.

10.4 The finally selected Bidder will have to apply to the proper Government Authority for grant of requisite License for such items as required and the purchaser will only tender such assistance, as considered necessary.

10.5 The firm has to provide the break-up of expenditure of different quoted items as well as total expenditure clearly for the whole items.

10.6 Excise/Custom Duty, VAT, Entry Tax and any other levy/surcharge in any shape or by whatever nomenclature may be included in the quoted amount unless it is specially mentioned separately.

10.7 The warranty charges shall not be quoted separately otherwise the offer shall be summarily rejected.

11. Purchaser's Right to Vary Quantities at the time of Award

The Purchaser reserves the right to vary the quantities and/or services.

12. Negotiation/Award of Contract

Prior to the expiry of the period of bid validity, the Purchaser will notify the finally selected Bidder(s) in writing by registered letter or by cable or telex or fax, to be confirmed in writing by registered letter or by Hand in person, that its bid has been accepted. If need for extension of the bid validity period arises, it should be extended by mutual agreement. Before the award of contract, the College may hold negotiations with the bidder, whose bid has been determined to

be substantially responsive to the bid documents and whose offers are lowest one. The aim is to reach agreement on all points and sign a contract.

13. Signing of Contract

13.1 At the same time as the Purchaser notifies the finally selected Bidder(s) that its bid has been accepted, the finally selected Bidder(s) shall collect the supply order, agreement/ Contract proforma from the office of the Principal IGMC Shimla.

13.2 Without prejudice to any legal remedy, failure of the finally selected Bidder(s) to comply with the requirement of Clause 2.3 (a) or Clause 2.3 (b)shall constitute sufficient grounds for the annulment of the award and forfeiture of the EMD, in which event the Purchaser may make the award to the next lowest evaluated Bidder or call for fresh bids.

14. Payment:

Payment of machinery/equipment will be released in two installments as under:-

- 90% after the satisfactory installation & functioning of the Machinery/Equipment/material in the Lab/department and receiving of certificate to that effect from the concerned Lab/department.

- 10% after 2 month's satisfactory working of the machinery/equipment and receiving of certificate to that effect from the concerned Lab/department.

Payment of Turnkey job will be released in two instalment as under :-

-50% on completion of at least half of the jobs under turnkey project

-50% after satisfactory completion certificate from the PWD(Civil & Electrical wings) and HOD of the Radiology Department.

15. Other Terms and Conditions of Tendering Firms

15.1 Printed terms and conditions to the Bidder will not be considered as forming part of their Bids. In case terms and conditions of the contract applicable to this invitation of tender are not acceptable to any Bidder, he should clearly specify deviation in his Bid.

16. Inspection and Tests

The Purchaser shall have the right to inspect and/or test the machinery/equipment for its conformity with the given Specifications.

16.1 In case any inspected or tested equipments fail to conform to the specifications, the Purchaser may reject them and the supplier shall either replace the rejected machinery/equipment's or make all alterations necessary to meet specification requirements free of cost to the Purchaser.

16.2 The supplier shall provide installation and standard tests for the individual equipment before the delivery of the system at site.

16.3 The supplier shall test each individual equipment and the complete system after installation at site and prepare a test report. This shall be compared with the factory test report to ensure that there is no deterioration in the equipment parameters during storage, transportation and installation.

16.4 Leaflets and literature should invariably be attached for ready references alongwith complete documentation of all the measurements conducted during installation period which shall be submitted by the supplier for future reference.

16.5 The technical problems faced during installation, testing and commissioning period and their solutions shall be submitted by the supplier at the time of handing over the completed works.

16.6 For the purpose of taking over the equipment/system supplied pursuant to this contract, an acceptance test shall be carried out at the Purchaser/Consignees destination site. The equipment which meets the acceptance test shall only be accepted by the Purchaser.

16.7 (a) Acceptance Test at site shall be conducted of individual equipment and complete system to ensure that individual equipment and complete system meets the technical specifications and other operational and technical requirements of tender.

(b) The Purchaser shall have the right to reject any individual equipment or complete system, if in its opinion the same does not meet technical specifications, operational or technical requirements. The decision of the purchaser in this regard shall be final.

(c) The delivery, installation or commissioning shall not be deemed to have been completed unless all the equipments and systems are accepted by the purchaser.

18. Warranty/CMC (AFTER SALES SERVICES)

18.1 The equipment shall be quoted with 3 years warranty. The warranty shall also cover the accessories supplied with the main equipment. However, it shall be noted that the warranty charges shall not be quoted separately otherwise the offer shall be summarily rejected. CMC shall be applicable to the post warranty period for 5 years and shall be quoted on yearly basis.

18.2 Incremental Cost (if any) for up-gradation, if required, should form part of the contract for the Warranty and Post Warranty period.

18.3 The Supplier (manufacturer) shall set-up a maintenance base to provide maintenance service, of the entire system being offered, at short notice during the warranty and post warranty period. The technical maintenance personnel of the supplier, responsible for supervision and maintenance, shall be available to reach the site(s) within 48 hours' notice.

18.4 If the performance of any individual equipment or system is not satisfactory, the same shall be replaced by the supplier free of cost.

18.5 If it is found that to meet the performance criteria, any extra equipment is required the same will be provided free of cost by the supplier.

18.6 Any lacuna or lacunae noticed in the functioning of the installation as a result of any design feature shall be rectified by the supplier free of cost.

18.7 The Supplier shall fully associate the engineers and technicians of the Institute during installation, testing, commissioning, operation and maintenance period.

18.8 The bidder shall attach an undertaking on affidavit from the original manufacturer that the AMC/CMC INDICATING THE CMC CHARGES after warranty period shall be provided by the manufacturer OR HIS SOLE All India distributor directly on the rates and terms finalized with the bidder. The manufacturer shall be liable for the aforesaid service in case the dealership is changed/back out.

19. <u>Spare Parts</u>

19.1 The Bidder will undertake that supplies of necessary maintenance equipment and spare parts will be made available for all items/equipments and for the complete system for at least twelve years on a continuing basis. An undertaking in this regard should be made available from the original manufacturer.

However, this does not relieve the supplier of any warranty obligations under the Contract.

19.2 The Bidder shall include in his tender, the details of essential spares, and their quantity and unit prices as per schedule of requirements.

19.3 In addition to the essential spares, Bidder shall indicate additional recommended quantities of spares for efficient maintenance of the equipment and the systems for a period of 9 years, after the completion of warranty period, to ensure that the quality and reliability objective is achieved. The details on which unit price and the total cost or recommended spares is based shall be included in the tender as an option. However, the cost of such recommended spares shall not be considered for tender evaluation.

20. Previous Installations

20.1 The names and address of the institutions/hospitals where the supplier has already installed/supplied the equipment indicating the dates of installations may be given (in India and abroad). He should also attach performance certificates to indicate his prompt after sales service.

20.2 On site functional assessment of the similar installation and equipment of the short listed Bidders will be undertaken, if necessary, by the Committee duly constituted by the IGMC.

21. Delivery, Installation and Commissioning

21.1 Delivery of the goods at the Institute premises shall be completed by the Supplier within 4 weeks from the date of Supply Order.

21.2 The installation, testing and commissioning of the proposed system shall be completed within 5 weeks from the date of Supply Order, failing which necessary action as deemed fit under rules, will be taken against the defaulter.

22. Site Preparation

22.1 The site for installation of the equipment shall be provided by the purchaser as per the required specification and environmental conditions before the installation of System/equipment/machinery.

22.2 Any civil/electrical work or other related works if specified/detailed in the technical specification shall be prepared by the supplier keeping in view the actual condition of site.

23. Incidental Services

23.1 The supplier is required to provide at free of cost to Purchaser all Hardware and Software up gradation from time to time, during warranty and CMC period.

23.2 Further, any bugs/shortcomings detected by the purchaser/user as well as the supplier himself shall be rectified at free of cost to purchaser even beyond warranty period

24. Property Rights

The Supplier shall indemnify the Purchaser against all third party claims of infringement of patent, copyright, trademark, license of industrial design rights, software piracy arising from use of the store/goods or any part thereof in the Purchaser's country.

25. Arbitration

Disputes, if any, shall be subjected to the sole arbitration of Principal Secretary/Secretary(Health) to the Government of Himachal Pradesh, whose decision shall be final and binding on the parties.

26. Jurisdiction

The courts at Shimla will have the jurisdiction for trial of any matter, dispute or reference between the parties arising out of the contract. It is specifically provided that no court outside and other than Courts at Shimla shall have jurisdiction in the matter.

27. Force Majeure

Any failure of omission or commission to carry out the provisions of the contract by the supplier shall not give rise to any claim by either of the party to contract, if such failure of omission or commission arises from an act of God, which shall include all acts of natural calamities such as fire, flood, earthquake, hurricane or any pestilence or from civil strikes, compliance with any stature and/or regulation of the Government, lockouts and strikes, riots, embargo or from any political or other reasons beyond the supplier's own control including war (Whether declared or not) civil war or state or insurrection, provided that notice or the occurrence of any event by either party to the other shall be given within two weeks from the date of occurrence of such an event which could be attributed to Force Majuere conditions.

28. Termination for default

The purchaser may without prejudice to any other remedy for breach of contract, by written notice of default sent to the supplier, terminate the contract in whole or in part.

i) If the supplier fails to deliver or install system within the time period(s) specified in the contract, OR

ii) If the supplier fails to perform any other obligation(s) under the contract.

29. Termination for Insolvency

The purchaser may at any time terminate the contract by giving written notice to the supplier, without compensation to the suppliers, if the supplier becomes bankrupts or otherwise insolvent (which shall be a breach of the contract on the part of the supplier), provided such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the purchaser.

30. Termination for Convenience

The purchaser may by written notice sent to the supplier terminate the contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for the Purchaser's convenience.

31. Up time guarantee:

The firm should provide uptime guarantee of 95%.

32. Downtime penalty Clause

32.1 During the comprehensive warranty period, the guarantee uptime as prescribed in Tender document/technical specification shall have to be ensured otherwise the penalty as specified shall be enforced. No discount will be given on account of public holidays/Sundays. The vendor must undertake to supply all spares for optimal upkeep of the equipment for at least TWELVE YEARS after handing over the unit to the Institute.

If accessories/other attachment of the system are procured from the third party, in such case the responsibility to keep the items/equipment's in working condition shall be the sole responsibility of the vendor and the bidder itself will have to sign the CMC with the Institute if required.

32.2 The principals or their agents are required to submit a certificate that they have satisfactory service arrangements and fully trained staff available to support the uptime guarantee.

33. PRICE FALL CLAUSE

The offer of rates by the tenderer will be subject to the price fall clause i.e. if any item is offered at a lower rate by the tenderer in any other State/Place in India to any other person/Org./Institution, he shall forthwith notify such reduction or sale to the Principal IGMC Shimla and the price payable for the Stores supplied to IGMC after the date of coming into force the such reduction or sale, shall stand correspondingly reduced even to IGMC.

34. The supplier shall furnish the following certificate alongwith each bill for payment for supplies made against in Rate Contract Tender.

"I/We certify that the Stores of description identical to the Stores supplied to the Government under the contract against Tender herein have not been offered/sold by me/us to any other person/organization/Institution upto date of bill/the date of completion of supplies against all supply orders placed during the currency of the tender/rate contract at the price lower than that of prices offered to the institute UNDER THIS CONTRACT/AGAINST TENDER".

The bidders must attach copies of their existing rate contracts, if any, with DGS&D or any other State Government/Institution.

NOTE :- BIDDER must go through these terms and conditions very carefully and put his signature alongwith stamp in token of acceptance of these terms and conditions. It shall also be noted that any further change in the tender documents shall be intimated/published only through website of this institute.

Principal
I.G.M.C., Shimla.

CHECK List duly filled in to be attached with the Technical Bid

S.N.	Particulars	
1.	Undertaking for No gratification as per clause 1.7	Yes/No
2.	Non-blacklisting certificate as per Clause 1.8	Yes/No
3.	Undertaking on affidavit from the original manufacture as per Clause 18.8	Yes/No
4.	Undertaking for the supply of spare part as per clause 19.1	Yes/No
5.	Whether a list of institution/organizations where your firm has supplied this item recently, is attached alongwith satisfactory performance certificate from those institution/ organizations. As per clause 20	Yes/No
6.	Certificate of having satisfactory service arrangement and fully trained staff as per clause 32.2	
7.	In case you are manufacturer, have you enclosed the certificate.	Yes/No
8.	Whether the prices has been quoted on the prescribed proforma.	Yes/No
9.	Whether all the undertakings as required in the tender document are enclosed	Yes/No
8.	Whether EMD as asked has been attached.	Yes/No
10.	Whether Tender Document duly signed by the authorized signatory attached.	Yes/No
11.	Whether the technical specification of the material are attached.	Yes/No
12.	PAN and copies of Income Tax Returns for the last three years.	Yes/No
13.	Copies of TIN issued/certificate of registration.	Yes/No
14.	Undertaking for supply of spare part during the subsequent twelve years(form G)	Yes/No
15.	Any other certificate/undertaking as prescribed in the tender	Yes/No

Authorized Signatory:

Name of the firm/bidder:

To be enclosed with Technical Bid

ANNEXURE-B

PROFORMA FOR AUTHORITY FROM MANUFACTURERS

No..... Dated.....

To,

Dear Sir,

Sub: Tender No.....

We..... an established and reputed manufacturers of ..... having factories at.....and office at M/s.....

(Name and Address of the Authorized representative) hereby authorise to represent us, to tender, negotiate and conclude the contract on our behalf with you against Tender no.....

No company/firm or individual other than M/s..... is authorized to represent us in regard to this business against this specific tender.

Yours faithfully,

Signature and seal

Name.....

For & on behalf of M/s

.....

(Name of Manufacturers)

Note: This letter of authority should be on the letter head of the manufacturing concern and should be signed by a person competent and having the power of attorney to bind the manufacturers.

To be enclosed with Technical Bid

ANNEXURE-H

BIDDER PROFILE

(A) General Information

(i) Location of Corporate Headquarters
(ii) Date and Country of Incorporation
(iii) Manufacturing facility(ies)
- Location
- Size
- Capacity

(iv) No. of service Facilities in India
- Location
- strength
- Area covered

(v) Average yearly turnover for last three years
(Attach copy of proof)
(vi) Geographical Distribution of the supplier
- No. of offices
- Locations
- Staff Strength

(vii) Total No. of installations of the system offered
(viii) No. of employees

Total No.	Manufacturing
R&D	Hardware Maintenance
Software	Any Other(Pl. Specify)

(B). Reference of Major installation with similar products
(Attach documents in support, if available)
Customer Name, Address Product Description,
Telephone/Fax No.

Signature
Name
Designation
Company
Date Company Seal

To be enclose with Technical Bid

ANNEXURE-F

BID FORM Dated:

To,

Sir,

Having examined the Bidding Documents of Tender No._____ undersigned offer to supply, install, commission, operate maintain_____ and we undertake, if our bid is accepted, to complete delivery of all the items specified in the contract within_____weeks calculated from the date of receipt of your Notification of Award and to complete the installation, testing commissioning..... We also undertake to supply the CMC and consumables on the rates offered/negotiated (in case our bid is accepted) for the entire period of _____ years from the date of satisfactory installation.

Signature and Seal

.....

(In the capacity of)

Only Authorized to sign bid for and on behalf of.....

To be enclosed with Technical Bid

ANNEXURE-G

PROFORMA OF GUARANTEE FOR SUPPLY OF SPARES DURING POST WARRANTY PERIOD

To

Dear Sir,

In consideration of the (hereinafter referred to as "Purchaser" which expression shall unless repugnant to the context or meaning thereof include its successors, administrators and assignees) having awarded to M/s…….. with its Registered/Head office at …….. (hereinafter referred to as the "Supplier" which expression shall unless repugnant to the context or meaning thereof, include its successors, administrators, executors and assignees), a contract by issue of the Purchaser's letter of Award no…….. dated entering into a formal contract to that effect with the Purchaser on ..…….. vide agreement dated…….. (hereinafter referred to as the contract).

We the supplier hereby give a guarantee for the supply of all necessary spares demanded for the routine and emergency maintenance of being supplied by us to for a period of not less than _____ years after the warranty period of 3 years and life time spares thereafter in case asked for by the purchaser.

We further clarify that for the first _____ years i.e. warranty period of _____ years, we are covered by the warranty clause as mentioned. For the remaining period of _____ Years and thereafter for the life time, a detailed list of spares will be supplied to the purchaser for the purpose of enabling him to decide spares needed for routine and emergency maintenance.

Dated..... day of.....20.....

Witness :

(Name of manufacturers)

Signature and Seal

(Signature)

Name :

For & on behalf of M/s

PRICE BID PROFORMA

ANNEXURE-D

Sr. No.	Name of the equipment	Price quoted
1.	Cost of Core Equipment. (Manufacturer/model/ make etc be specified) including all accessories as required in the technical specification with 3 years warranty.	
2.	Taxes/Duties :-	
	i) Custom Duties	
	ii) CST/VAT	
	iii) Service Tax	
	iv) Entry Tax	
	v) Others(Pl. specify)	
3.	CMC (after 3 years warranty) 1st year 2nd year 3rd year 4th year 5th year Taxes on CMC(if any)	
4.	Cost of Turn Key Job	
5.	Less : Buy back offer, wherever applicable.	
5.	Net Price	

It is certified that the cost of equipment and reagents shown above, has included all taxes/ duties etc. and nothing above shall be charged over and above this cost.

Authorized Signatory:
Name of the firm/bidder:

PRICE BID PROFORMA FOR ITEM NO. 15

ANNEXURE-D-1

S.N	Name of the equipment		Price quoted
1.	Cost of Core Equipment. (Manufacturer/model/ make etc. be specified) including all accessories as required in the technical specification with 3 years warranty		
2.	Taxes/Duties :-		
	i) Custom Duties		
	ii) CST/VAT		
	iii) Service Tax		
	iv) Entry Tax		
	v) Others(Pl. specify)		
3.	CMC (after 3 years warranty) 1st year 2nd year 3rd year 4th year 5th year Taxes on CMC(if any)		
4.	Cost of Turn Key Job		
5.	Cost of consumables for conducting required No. of tests as per specification	**Cost per annum**	**Cost for 8 years**
6.	Net Price :		

The bidders are advised to provide the details of quantities, pack size and cost per pack etc. of all consumables, solutions etc. required for conducting the requisite No. of tests in a separate sheet. The cost of cuvette and frequency of replacement as required in the specification shall also be intimated separately.

It is certified that the cost of equipment shown above, has included all taxes/duties etc. and nothing above shall be charged over and above this cost.

Authorized Signatory:
Name of the firm/bidder:

PRICE BID PROFORMA FOR ITEM NO. 10,11,13 & 14

ANNEXURE-D-2

S.N	Name of the equipment	Price quoted
1.	Cost of Core Equipment. (Manufacturer/model/ make etc. be specified) including all accessories as required in the technical specification with 3 years warranty	
2.	Taxes/Duties :-	
	i) Custom Duties	
	ii) CST/VAT	
	iii) Service Tax	
	iv) Entry Tax	
	v) Others(Pl. specify)	
3.	CMC (after 3 years warranty) 1st year 2nd year 3rd year 4th year 5th year Taxes on CMC(if any)	
4.	Cost of Turn Key Job, if required.	
5.	Net Price :	

Note :- The rates for consumables and other items as required in the technical specifications in respect of above items shall be quoted on a separate sheet stating therein the pack size and cost per pack etc. on compulsory basis., otherwise the bid shall not be considered.

It is certified that the cost of equipment shown above, has included all taxes/duties etc. and nothing above shall be charged over and above this cost.

Authorized Signatory:
Name of the firm/bidder:

To be enclosed with Technical Bid

ANNEXURE-E

BIDDER PARTICULARS

Bidder Serial Number Allotted on Tender Document: _____

1. Name of the Bidder :

2. Address of the Bidder :

3. Name of the Manufacturer (s) :

4. Address(es) of the Manufacturer :

5. Name and address of the person :

To whom all references shall be

Made regarding this tender inquiry.

Telephone :

Telex :

Fax :

e-mail address :

Witness :

Signature	Signature
Name	Name
Address	Designation
	Company
Date	Date
	Company Seal

ANNEXURE-A

Item No. 1 : Specifications for MALDI-TOF

1. System should be modular vertical design
2. System should have Tandem TOF analyzers
3. Linear (optional), reflector, or MS/MS acquisition
4. System should have variable ion path length to accommodate:
   - MS Linear mode
   - MS Reflector mode
   - MS/MS mode
5. Automated single-plate sample-loading system
6. Video camera for sample viewing within software interface
7. 200-Hz laser or better
8. Positive and negative ion detection
9. Two variable two-stage ion acceleration regions
10. Automated matrix ion deflection
11. High-resolution precursor selection
12. High-energy, collision-induced dissociation (CID) cell
13. High-performance, two-stage reflector
14. High-speed 200-Hz digitizer or better
15. Intuitive Microsoft® Windows® XP-based software

Item No. 2 : Specifications of 2D Electrophoresis

1. System should perform immobilized pH gradient isoelectric focusing having control software driven facility.
2. The control software should enable creation storage and editing of protocols.
3. The unit should accommodate at least a minimum of 10 regular strips in the range of length 7cm to 13cm and is capable of running at least 10 strips simultaneously.
4. Should have gold plated copper electrode areas for efficient and even maintenance of temperature.
5. System should have integral atleast 10000V power supply (in atleast 10 volt step), peltier solid state control temperature in the range of 15°C to 31°C and between 0 to 1.5mA (atleast 1uA or more per strip step)
6. System should be supplied with a rehydration tray for accommodating atleast a minimum of 10 strips (in the range of size 7cm to 13cm) and with a focusing tray which can accommodate atleast a minimum of 10 strips of size in the range of 7cm to 13 cm.
7. The unit should have a programmable controller to store up to atleast 10 protocols. Each protocol should include the parameters of rehydration, temperature, and voltage limits in each steps, voltage step or gradient and maximum current per strip.
8. System should be s+upplied with a new computer and the unit should be connected to it.
9. The unit should have automatic voltage cut off when safety lid will be open.
10. The unit should secure light protection during the run. Unit should be compatible with dye-labelled proteins and other light-sensitive stains
11. System should be capable of performing second dimension separations for strips of size 7 to 13 cm size.
12. The second dimension electrophoresis system should maintain temperature with built in heat exchanger for faster runs with high quality
13. The second dimension system should run up to four gels at the same time.
14. Mini electrophoresis capable of running atleast a minimum of 2 mini gels using gel cassettes of minimum size of atleast 10 cm x 10.5 cm.
15. Instrument should be supplied with all accessories like 2 sets of glass plates, notched plates, combs, spacers,

low fluorescent glass plates.

16. Should provide sample preparation kit and starter kit.
17. Power supply capable of running 2 units and delivering upto 600volts, 400mA and 100 watts

Analysis Software

1. Should capture 8,16 or higher bit images of tiff/JPEG format
2. Imaging software should be able to create new projects, folders and classes having features of image rotation, flipping, and cropping
3. Software should be able to work on minimum 6 or more gels at a time with selection display, create scripts, spot matching by annotations, simultaneous display of multiple images
4. Should have adjustable saliency to differentiate spots from noise, gel image stacking and tiling (unlimited number on screen), intensity calibration from scatter plot of two gels
5. Should provide gel alignment on matches with transparency mode, possibility of using minimum 6 or more references, set type of annotation to mark spots having same characteristics
6. Should provide the capability of making histogram with error bars, computing of overlapping measures between classes, factorial analysis, report, and 2-D graphs.

Item No. 3 : GAS CHROMATOGRAPH SPECIFICATIONS:

The System must have the following features:

1. System must have Electronic pneumatic control (EPC) control
2. Pressure set points may be adjusted by increments of 0.001 psi with typical control ± 0.001 for the range0.000 to 99.999 psi
3. One-button access to routine maintenance information.
4. System must have RTL (Retention time locking feature) for reproducible results.
5. User list of the quoted model should be given.
6. The system should have at least two inlets and three detectors.

Column Oven:

1. Accommodates up to two 105 m × 0.530 mm id capillary columns
2. Operating temperature range suitable for all columns and chromatographic separations. Ambient temperature +4 °C to 450 °C.
3. Temperature set point resolution: 1 °C
4. Supports 20 oven ramps with 21 plateaus. Negative ramps should be allowed.
5. Maximum achievable temperature ramp rate: 120 °C/min Oven cool down (22 °C ambient) 450 to 50 °C in 4.0 min

1. Ambient rejection: < 0.01 °C per 1 °C.

Split/split less capillary inlet (S/SL) – 2 No.s

1. Suitable for all capillary columns (50 µm to 530 µm id).
2. Split ratios up to 7,500:1 to avoid column overload.
3. Splitless mode for trace analysis.
4. Pressure-pulsed splitless is easily accessible for best performance.
5. Maximum temperature: 400 °C.
6. Special inlet system must be built in standard with S/SL inlet for quick, easy, injector liner changes

Flame Ionization Detector with EPC

1. Minimum Detection Limit : <1.5 pg C/sec

2. Should be optimized for capillary columns with maximum operating temperature of 450°C.
3. Automatic Flame-out detection should be possible.
4. The linear dynamic range should be 10^7
5. The detector should have a data acquisition rate of up to 500 Hz.

Electro Chemical Detector with EPC

1. Minimum Detectable limit should be 4.4 fg/ml lindane or better
2. Linear Dynamic Range should be >5.0 X 10^4 with lindane
3. Data Acquisition rate should be 50 Hz or better.
4. Maximum operating temperature should be 400 ^{o} C or better.

Auto-Sampler with minimum 15 vials should be quoted with the system.

Chromatographic Data Software:

Single point control of all GC and its modules, customizable reports, GLP features should also have software for data acquisition, control, chromatographic data evaluation, reporting sequencing.

Item No. 4 : Different Equipments

S. No	DESCRIPTION	Qty
01	WIDEMINISUB GT,CASTER,15X7TRA	**01**
02	MINI TRANS-BLOT CELL	**01**
03	Millipore Vacuum Pressure pump KIT	**01**
04	POWERPAC BASIC POWER SUPPLY LSD	**01**

05	Micro centrifuge (fixed rotor speed 6000 rpm)Weight : 800 gms., 1UNIT	
06	Platform Rocker I (One Platform)	**01**
07	**CRYOCAN (BIOLOGICALS),** Capacity LN_2 : 47.3 Liters Empty Weight : 15.9 kg Full Weight : 54.1kg Neck Dia : 120mm Outer Dia : 460mm Total Height : 695mm Static Evaporation Loss Rate : 0.38 ltrs. Per day Static Holding Time : 124 days Canister OD : 72mm Canister Height : 280mm No. of canister : 11 nos. Straw Capacity : 8000 (0.5ml) Straw Capacity (Double level): 18000 (0.25ml)	**01**
08	Immobilon NC Transfer Membrane 33cm X 3m	**01**
09	**ANALYTICAL BALANCE**	**01**
	Maximum capacity : 220 g Weighing platform dimensions : 90 mm Readability : 0.1 mg Repeatability : 0.1 mg Linearity : 0.2 mg Settling time : 2 s Sensitivity temperature drift : 2.0 ppm/°C Weight of balance : 4.7 kg (ME) / 4.5 kg (ME-E) Applications : Formulation, totaling, dynamic weighing, piece counting, density, percent weighing, check weighing, statistics, dosing, free factor	
10	**WEIGHING BALANCE** Maximum capacity : 220 g Weighing platform dimensions : 120 mm Readability : 0.001 g	**01**

	Repeatability : 0.001 g Linearity : 0.002 g Settling time : 1.5 s Sensitivity temperature drift : 3.0 ppm/°C Weight of balance : 4.6 kg Applications : Formulation, Totaling, Dynamic Weighing, Piece Counting, Density, Percent Weighing, Check Weighing, Statistics, Free Factor	
11	Protein Estimation Kit by Lowry's Method, 250 reactions	**01**
12	OmniPur™ SILVER PRO STAIN KIT	**01**
13	Trail Mix Protein Markers, 100 lanes	**01**

Item No. 5 : SPECIFICATION OF THREE PART HEMATOLOGY CELL COUNTER

1. Must be touch screen and able to report & print all 18 parameter i.e. HGB, RBC, HCT, MCV, MCH, MCHC, RDW, PDW, PLT, MPV, PCT, WBC, LYM# & %,MON# & %,GRA#& %.
2. Should work on COULTER principle i.e counting and sizing.
3. Should have throughput of not less than 50 samples per hour.
4. Should be able to give pathological flags specially indicating for Microcytes, Schizocytes, Melocytes, Metamyelocytes, Lymphoblast, Eosinophillia, NRBCs.
5. Sample volume should be less than 50 µl for all 18 parameters including pediatric sample and a predilutional mode with sample requirement not more than 20 µl.
6. It should be able to do auto numbering in reference to patient Id.
7. Should have bar code reader incorporated.
8. Automatic cleaning of sample probe (Internal &external).
9. Option for open tube & closed tube should be available.
10. Must have floating threshold to separate overlapping of PLT & RBC during sample analysis.
11. Single button start up and shut down.
12. Should have special provision to avoid sample carry over.
13. Multiple counting of samples without extra cost.
14. Should have Hb estimation comparable to reference method
15. Must have RS 232 port and USB ports for data transfer to host computers& data & storage devices.
16. Must have in built or external memory of at least 50000 patient results.

17. Must have in built printer and option for external printer.
18. Linearity limit must be as follows for RBC (0.0-7.00 × 10^6 cells/µl), WBC(0.0-99.9×10^3), PLT(0.0-999×10^3) & Hb (0.0-25.0g/ dl)
19. Carry over for various parameters should be < 2%.
20. Cost of calibrator and cost of controls to be quoted in the price bid separately.
21. All prices of reagents and controls to be quoted in the price bid and frozen for next 10 years.
22. There should be no hidden cost in consumables, reagents and accessories and if any shall be borne by the supplier/company
23. Cost per test as follows to be quoted in the price bid
    CBC + Differential: 75 tests/day
24. Reagent cost for start up , shut down and per cycle cost should be mentioned in price bid freezed for for next ten years .
25. Instrument should be supplied with a three year warranty followed by CMC for next five years. CMC should include all consumables including PP tubing, PM kit, bulbs , filters and all other consumables and accessories required for the running of the equipment.
26. The company should provide start up reagents and consumables for 5000 tests.
27. Must have installation base of at least 25 units in india with good service record.
28. Blood mixer ISI mark for proper mixing of samples to be provided.
29. Latest tender specific authentication certificate and USFDA approval certificate.
30. A compatible laser printer with requisite connecting cable of reputed company for print out of results to be provided.
31. Furniture items e.g. table/chair (branded) required with the instrument to be supplied by the supplier.
32. The instrument is to be installed by the supplier. Any civil and electrical work required for installation to be done by the supplier.
33. An online UPS with ISI mark from reputed manufacturers with back up of at least 2 hours to be provided to run the machine in case of electricity failure.
34. The instruments should have 95% uptime failing which a penalty of Rs.5000/- per day after 24 hours of complaint to be levied.

Item No. 6 : Specification for Automated DNA Sequencer

1. Fully automated capillary, fluorescence-based DNA Sequencer which should have CE-IVD Certification for instrument, software and reagents.

2. Only licensed version of the system to be quoted along with user license to perform the sequencing by Sanger.

3. Number of capillaries: 8 Capillaries operating in parallel and must be upgradable to 24 capillaries to meet future throughput. Employ capillary arrays that use bare silica capillaries with a useful life that exceeds 160 runs.

4. Application: Should be able to perform Re-sequencing, bacterial sequencing, Long Read Sequencing, and comparative sequencing, Fragment analysis applications like SSR, ISSR, & Microbial Finger printing, Microsatellite, Long Sizing, SNP Validation and screening, Allele calling etc.

5. Excitation source: Single line 505 nm solid state long life laser utilizing a standard power supply and without heat removal ducting.

6. Dye detection: Cooled CCD detection technology and a spectrograph for color separation. System must be able to detect and analyze 6 fluorescent dyes simultaneously for DNA fragment analysis.

7. Capillary illumination: Simultaneous dual-side illumination detection system to maximize signal uniformity and sensitivity that in turn reduces the requirements placed on the user for sample preparation and cleanup.

8. Tracking of consumable: Radio-Frequency identification technology to tracks key consumables data.

9. Heating/cooling: Active temperature cooling/heating that can maintain temperatures from 18oC to 70oC.

10. Sequencing throughput :> 280 samples/day having 850bp read length with QV20. System should support read length > 1000 base pair.

11. Electrophoresis Voltage: Up to 20 kV.

12. system should be provided with suitable branded Desktop for data analysis.

13. Software: The vendor must supply softwares that are optimized for the instrument in the area of de novo, Re-sequencing, Long Read Sequencing, and comparative sequencing, Fragment analysis applications like SSR, ISSR, AFLP Plant & Microbial Finger printing, Microsatellite, Long Sizing, SSCP, SNP Validation and screening, Linkage analysis.

14. Real time analysis: System software should allow real-time date quality evaluation providing immediate access to base-called or size called date to make decision about the quality of data as it is generated.

15. Consumables: Applications-specific kits and sequencing reagents required to perform the sequencing by sanger should be manufactured and available from the same supplier. A Full compliment of chemistry kits for clinical/diagnosis applications should be available from the vendor.

16. Free of cost system installation and operator training performed by a vendor service engineer.

17. The Vendor should have a good service and application support back up along with instruments to provide an effective application related troubleshooting and support .The vendor should provide Application Training on the operation of the instrument, chemistry options and software in there regional lab.

18. Vendor should have at least 100 installations (includes all the available models) in India.

19. Suitable UPS for running the system.

20. Electrical requirement: 220 volt, 50 Hz.

Item No. 7 : TRINOCULAR MICROSCOPE

OPTICAL SYSTEM	CFI60 INFINITY CORRECTED SYSTEM OR UIS2 (Universal Infinity System) Optical System
ILLUMINATION	LONG LIFE LED TYPE
EYE PIECE	10X (25MM OR MORE) WITH DIOPTER ADJUSTMENT ON BOTH EYES.
EYE PIECE TUBE	TRINOCULAR 3 WAY TUBE (25MM OR MORE) (100/0,20/80,0/100)
NOSEPIECE	QUADRUPLE NOSEPIECE OR MORE NOSEPIECE
CONDENSOR	ABBE CONDENSOR
OBJECTIVES	ANTIFUNGAL PLAN ACHROMAT OBJECTIVE 4X ,10X, 40X AND 100X (OIL) WITH ANTIFUNGAL CERTIFICATION
CAMERA	2/3 " CCD CAMERA WITH RESOLUTION OF 5 MP OR MORE; FIRE WIRE PORT TO ATTACH CAMERA TO

COMPUTER FOR FAST TRANSFER OF IMAGES.

IMAGE ANALYSIS SOFTWARE:

IMAGE ANALYSIS SOFTWARE FOR IMAGE ACQUISTION, Z-STACK, MULTI-CHANNEL FLUORESCENCE, ANNOTATION, 2D / 3D VIEW, ND VIEWER FILTER, MORPHOLOGY, LARGE IMAGE, SEGMENTATION, AUTO-MEASUREMENT, REPORT GENERATOR FACILITY, DATA BASE, VECTOR LAYER & MULTI-DIMENSIONAL FILE FORMAT (ND FORMAT)

DATA COLLECTION AND PROCESSING UNIT: INTEL I5 PROCESSOR, 4 GB RAM, DVD READER/WRITER, 500 GB OR HIGHER HDD, 19" TFT COLOR MONITOR , WIN 7 OPERATING SYSTEM, MULTIMEDIA KIT ALONG WITH UPS

Note : Microscope , Camera and Software should be from same manufacturer for better compatibility and future upgradation possibilities.

Microscope Should be ISO 14001, 9001 certified.

Item No. 8 : SPECIFICATION OF IMMUNO FLORESCENT MICROSCOPE

System should be European CE marked or USFDA approved

OPTICAL SYSTEM	INFINITY CORRECTED OPTICAL SYSTEM
MAGNIFICATION	40x- 1000x FOR OBSERVATION.
EYEPIECE TUBE	TRINOCULAR TUBE (INCLINATION: 30º.
	INTERPUPILLARY DISTANCE:40-80mmOR BETTER
EYEPIECE	10X PAIR WITH F.O.V: 20MM OR BETTER
NOSEPIECE	QUADRUPLE NOSEPIECE or
	Quintuple /Sextuple Nosepiece with inbuilt Polarizing and analyzing slot and reversed type.
STAGE	SHOULD BE REFOCUSING TYPE THE
	STAGE CAN BE INSTANTLY DROPPED BY
	PUSHING IT DOWN TO EXCHANGE SPECIMENS
	OR OIL THE SLIDE, THEN RETURNS TO THE

	ORIGINAL POSITION AS SOON AS THE HAND IS REMOVED. Or reckless mechanical stage
STAGE SIZE	STAGE SHOULD BE RECTANGULAR
	STAGE SHOULD ACCOMODATE **2 SLIDES OR MORE AT A TIME**. **STAGE SHOULD BE PROVIDED WITH UPPER LIMIT STOPPER.**

OBJECTIVES	**OBJECTIVE**	**N.A**	**W.D**
	CFI PLAN ACHROMAT 4x		
	CFI PLAN ACHROMAT 10x	0.25	7.0MM
	CFI PLAN ACHROMAT 40x	0.65	0.65MM
	CFI PLAN ACHROMAT 100x OIL	1.25	0.23MM

CONDENSER	**ABBE CONDENSOR OR Turret type universal phase/Brightfield/darkfield condenser.**
ILLUMINATION SYSTEM	LED LAMP.
DIGITAL CAMERA SYSTEM	DIGITAL CAMERA CAPABLE OF HANDLING BRIGHTFIELD, FLUORESCENCE, DIC, DARKFIELD IMAGES WITH 2/3" HIGH DENSITY CCD CHIP, APPROX. 5.24 MILLION PIXEL RESOLUTION. SHOULD HAVE FIRE WIRE PORT FOR FAST TRANSFER OF IMAGES FROM CAMERA TO COMPUTER.

IMAGE ANALYSIS SOFTWARE WITH FOLLOWING FEATURES:-

- ACQUISITION AND DEVICE CONTROL THROUGH FOUR-DIMENSIONAL TIME LAPSE IMAGING,
- Z-STACK, MULTI-CHANNEL FLUORESCENCE, ANNOTATION,
- 2D / 3D VIEW, ND VIEWER,
- FILTER
- MORPHOLOGY, LARGE IMAGE,
- SEGMENTATION,
- REPORT GENERATOR FACILITY,

Data Collection and processing unit:

Intel i3 processor or higher Pentium processor, 2 GB RAM, CD Reader/Writer, 500GB or higher HDD, 18.5" TFT color monitor , WIN 7 operating system, along with UPS

Note- Microscope ,Camera , software should be from same manufacturer for better compatibility of complete system and future up gradation possibilities.

FLUORESCENE ATTACHMENT 50W MERCURY ILLUMINATION . or based upon high brightness LED

- FILTER BLOCK FOR BLUE WITH EXCITATION FILTER EX450-490, DICHROIC MIRROR DM505 AND BARRIER FILTER BA520 FOR FITC/GFP
- FILTER BLOCK GREEN WITH EXCITATION FILTER EX 510-560, DICHROIC MIRROR DM575 AND BARRIER FILTER BA590 FOR TRITC/RHODAMINE/PROPIDIUM IODIDE.

Warranty: 3 years warranty period followed 5 years CMC should be provided. All the parts of microscope will be supplied free of cost including third party purchase during the period of warranty and CMC.

Produced in an ISO 9001:2000(TUV) & ISO 14001 certified manufacturing facility

The Manufacturer of the product should have the annual turnover of minimum 20 crores and above. Customer performance certificates minimum 25 from medical colleges and Hospitals or end users.

Demonstration required.

Item No. 9 : Technical Specifications of Mini Cold Lab (Walk in cold room)

(A)	**TECHNICAL SPECIFICATIONS OF COLD ROOM**
	Dimension: Cold Room Size: 8 feet x 8 feet x 8 feet.
	Fit for storage of Diagnostics Kits & Reagents.

	Insulation 60mm thick Prefabricated Polyurethane Foam (PUF) panels, stainless steel (SS 304 grade sheet) inside on walls, ceiling & outside walls PPGI.
	Floor with anti skid tiles.
	Compatible with Ambient temperature (max) of 45*C
	Compatible with entering product temperature of 25*C.
	At least 12 door openings per 24 hours.
	Final cold room temperature required: 2*C to 8*C
	R404 Refrigerant/CFC free.
	Door size 34 inches x 78 inches clear door opening
	Heavy-duty hinges.
	Digital temperature indicator on front side, data logger with pen dirve
	Door with Airtight seal Gasket and lock.
	Safety release knob.
	Refrigeration unit: Two Nos.(one working and one standby) and each of 10000BTU/Hr. Suitable condensing unit-single phase, 50Hz, 220V and evaporating unit eurovent certified with jet streamer. (Make: Carrier / Emerson / Bitzer / LU-VE)
	Electrical panel – MCB of suitable capacity.
	Compatible voltage stabilizers with Timer Delay (ISO 9001 certified) of suitable rating
	Automatic off cycle defrosting unit.
	Stainless Steel racks (05 nos) (Height-72 inches x depth 18 inches x width 30 inches) with 5 shelves
	Warranty of unit & stabilizer: Three years.
	Service back up: The suppliers should ensure service back up within 24 hours in case of any break-up.
	The scope of work shall also include requisite minor civil works, unloading, shifting, safe storage of unit at site, providing structural supports for mounting panels, installations, hanging units and pipes, Freight, Taxes.
	CMC: 5 years after the expiry of warranty of the entire system including compressor.
	Manufacturer should supply the original technical literature of the equipment
	Users list/installation of having supplied minimum 5 installations in AIIMS/PGI or any other Govt. Institutions within last five years.

(B)	**ANTE ROOM**
	Ante Room area of 8 ft x 4 ft x 8 ft.
	Floor: Anti skid tiles
	Wall paints: Oil bound acrylic emulsion.
	Aluminium Frame Door with lock: 900mm x 2000mm sensor based door with air curtains
	Office Table with 01 drawer and shelf, 01 office chair
	Electrical switch gears with minimum 2 x 15 amp switch and 2 x 5 amp switch.

Item No. 10. Specification for Cryostat Microtome

- Should be a floor mounted unit.
- Should have icon driven interface.
- Should allow rapid selection and adjustment of functions.
- Should have 10 minute specimen fast-freeze function which can be accessible from the menu.
- Should have stainless-steel chamber and smooth surfaces to allow efficient cleaning of the chamber and chamber brightness should be adjustable.
- Unit should have light-touch hand-wheel requiring minimal force and should have a lock to completely immobilize the specimen head.
- Unit should have additional knee space and preferably body contoured arm rests.
- Unit should have large flat top to keep accessories readily available.
- Should have stepper motor technology to deliver reproducible section thickness.
- Should have chamber temperature control -35 ºC.
- Should have automatic specimen retraction on return stroke.
- Should have cryo-bar cooling and Peltier driven quick freeze cooling system.
- Chamber temperature should have max. of -35°C -2K/+1K at +20°C room temperature.
- Should have at least 20 cooled specimen positions, including four integrated fast-freeze peltier driven quick freeze positions cooling to -55°C.
- There should be options for programmed and immediate defrosting.
- Should have section thickness range from 1-500 µm, fine section thickness range should be from 1-100 µm.
- Should have trimming thickness range from 5-500 µm
- Should have specimen retraction of 20 µm.
- Should have vertical specimen stroke of 64 mm.
- Should have horizontal specimen movement of 28 mm.
- Chuck size should be 30 and 40 mm.
- Should have specimen orientation x - and y - axes universal 8° with zero positioning and z - axis up to 360°.
- Should have motorized coarse feed and manual cutting drive via hand wheel.
- Should have clearance angle adjustment of disposable blade carrier from 8° to 16°.
- There should be no buildup of debris behind the microtome and should be easily cleanable.
- Should have high intensity UV light disinfection with adjustable disinfection time. Alert screen should indicate incomplete or interrupted disinfection cycle.
- Should have option for immediate or scheduled disinfection operation.

- Should have adjustable disinfection time.
- Should have built-in alert system for service needs.
- Should have USB port to allow file transfer for troubleshooting.
- Should work on 220-240 V, 50-60 Hz AC supply.
- Instrument should be supplied with
    - 15 chucks of 30 mm
    - 15 chucks of 40 mm
    - Distance bolts – 2
    - Allen key 5 mm and 6 mm – 1 each
    - Flat brush – 6
    - Round brush – 6
    - Open-end wrench – 1
    - Long and small waste tray s – 1 each
    - Deposit racks for each side – 1 each
    - Instruction manual
    - 5 packets of low-profile disposable blades
    - Cryostat oil – 500 ml
- Unit should be installed by the supplier and all civil and electrical work if required to be carried out by the supplier.
- Unit should come with 3 year warranty followed by 5 year CMC.
- Rates of all consumables e.g. blades, oil, etc. to be fixed for 8 years in the financial bid.
- Should have 95% uptime with penalty of Rs.5000/- per day after 24 hours of complaint.

Item No. 11 : Specifications for Fully Enclosed Tissue Processor

- Unit should be floor mounted with processing of tissues in a single enclosed air tight reaction chamber with pump in and pump out of reagents and wax.
- Unit should have an easy-to-use operating mode for routine operations.
- Unit should be able to process at least 300 cassettes at a time.
- Unit should have systematic logging and reporting of quality control data, event records, and program information.
- Unit should have facility of automatic in-process reagent rotation.
- Should have three distinct fill levels in chamber to shorten processing times.
- Should have ten customized programs and five flush options.
- Unit should have clear and easy-to-read touch screen interface with colorful graphics and international icons.
- Should have reagent monitoring and management system.
- Reagent quality of first alcohol should be measureable by using specific gravity as well as operator. Should be alerted when replenishment of reagents is needed.

- Reagent preheating for more consistent and rapid processing facility should be there.
- Should have facility of continuous agitation to circulate reagents freely around specimens.
- Organized basket should be so designed as to prevent cassette bunching.
- Organized and random baskets should be microwavable.
- Standard tool kit and user manual to be provided.
- 5000 plastic cassettes and 5000 moulds to be provided.
- Unit should have CE/FDA certification.
- Should have serial RS-232 and RJ-45 ports.
- Should work on 220-240 V / 50-60 Hz AC supply.
- Should have integrated or external UPS 1000W with at least 30 minutes backup.
- Equipment is to be installed by the supplier and any electrical and civil work if required to be done by the supplier at no extra cost.
- Should have warranty for 3 years followed by subsequent CMC for 5 years.
- Should have 95% uptime with penalty of Rs.5000/- per day after 24 hours of complaint.
- Rates of plastic cassettes/moulds and all consumables to be fixed for 8 years.

Item No. 12 : Specification for Embedding Station

Should be table mounted unit.

Embedding Centre

- Should have paraffin dispenser with a capacity of 3-5 liters.
- Should have separate on/off switches and temperature control from 30° to 80°C.
- Should have manual lever and foot switch for wax dispensing.
- Work surface dimensions should be at least 450x300 mm with integrated hand rest and cold spot with separate on/off switch and electronic control from 30° to 70°C.
- Work surface should be higher than the preheat station and cooling plate.
- Should have 4-6 forcep wells.
- Should have heated forceps.
- Should have waste wax container.
- Should have viewing lens with integrated LED lights.

Preheat Station

- Heated chamber should have with capacity for 500 embedding moulds with separate on/off switches and electronic control from 30° to 80°C.
- Cassette holding bath should have capacity for 150 cassettes with on/off switches and electronic temperature control from 30° to 80°C.

Cooling Plate

- Cooling surface dimensions should be at least 400x300 mm made of anodized aluminium or any other suitable metal.
- Cooling plate should be recessed so that there is no overflow of condensate after switching off.
- Should be able to cool at least 80 cassettes to -15°C

Should have warranty for 3 years followed by CMC of 5 years.

Unit is to be installed by the supplier and any civil or electrical work if required is to be done by the supplier.

Should have 95% uptime with penalty of Rs.5000/- per day after 24 hours of complaint.

Item No. 13 : Specification Semi Automatic Rotary Microtome

- Should have ergonomic design.
- Should have compact dimensions.
- Should have vertical guidance by zero-backlash and maintenance free cross roller bearings.
- Should have electronic precision feed mechanism with stepping motor technology.
- Should have section thickness range from 0.5 up to 500 um.
- Fine section thickness range from 0.5 to 100 microns.
- Should have especially smooth running hand-wheel.
- Should have one hand quick clamp change.
- Should have common low & high profile disposable blade holder.
- Should have fine orientation with one hand operation and zero positioning.
- Should have easy exchange of specimens.
- Should have specimen retraction during return travel, can be turned off.
- Should have two section thickness areas that can be pre selected easy switchable.
- Should have removable operating panel with full graphic display.
- Facility of indication of all relevant information such as section thickness, trim thickness, number of sections, section thickness sum, and remaining travel of the specimen feed as well as time and date.
- Should have reduced number of buttons for intuitive operation.
- Should have patented and ergonomic one knob operation of the specimen feed with variable speed adjustment.
- Should have indication of cutting parameters can be switched over to large indication.
- Should have large section waste tray, covering the entire working area.
- Should have ergonomically optimized operating elements for non tiring usage.
- Design with highest demands concerning operational safety and ergonomics.
- Should have integrated removable storage plate.
- Should have stepping motor micrometer mechanism.
- Specimen retraction during return travel : 40 um can be turned off.
- Fine section thickness feed via precision stepping motor should be from:
    - 0.5 to 100 microns,

    - up to 2 um in 0.5 um increments,
    - up to 10 um in 1 um increments,
    - up to 20 um in 2 um increments,
    - up to 30 um in 5 um increments,
    - up to 40 um in 10 um increments,
    - up to 100 um in 20 um increments.
- Trimming thickness feed via precision stepping motor up to 500 um should be:
    - up to 10 um in 5 um increments,
    - up to 100 um in 10 um increments,
    - up to 200 um in 20 um increments,
    - up to 500 um in 50 um increments.
- Should have horizontal feed range 28 mm.
- Should have vertical specimen stroke 72 mm to make possible cutting of larger tissue.
- Should have specimen orientation universal 8°, can be rotated 360°.
- Microtome is to supplied with following items:
    - Object orientation unit.
    - Standard object clamp/universal cassette clamp.
    - Disposable blade holder with common base for high- and low-profile blades.
    - Five packets of low-profile blades.
    - Knife holder.
    - Tungsten carbide knife (wedge profile) 2 nos. 16 cm with their cases.
    - 6 needles.
    - Section waste tray.
    - Tool kit and user manual.
- Should operate on 220-240 V, 50-60 Hz AC supply.
- Should have integrated safety fuse.
- Unit must be CE/FDA approved.
- Unit should be supplied with a tissue floatation bath having black anodized internal surface, outer powder coated aluminum body, having a capacity of 2.5 to 3.5 liters, thermostat controlled temperature selection from 40° to 75° C, digital temperature display and preferably with a flush in the wall and a lid.
- Unit should be supplied with a slide warming table suitable for at least 25 standard sized glass slides, having a Teflon coated heating plate, thermostat with a temperature range from ambient to 75° C.
- There should be a warranty of 3 years followed by CMC for 5 years.
- Should have 95% uptime with penalty of Rs.5000/- per day after 24 hours of complaint.
- Rates of high and low profile blades, Tungsten carbide knife and all consumables (e.g. oil, cassettes, moulds, etc.) to be fixed for eight years in the financial bid.

Item No. 14 : Specifications for Manual Rotary Microtome

- The system should be able to cut biological specimens into transparent thin sections for microscopic examination.0
- Should facilitate cutting of specimen size up to 50x50 mm with standard object clamp.

- Section thickness should be selectable from 0.5 µm – 60 µm with following increments:
    - 0.5 µm from 0.5 µm – 2 µm
    - 1 µm from 2 µm – 10 µm
    - 2 µm from 10 µm – 60 µm
- Should have horizontal specimen advance of at least 28 mm.
- Should have vertical stroke of at least 60 mm
- Specimen orientation in x,y axes should be 8°.
- Specimen orientation in z-axis should be 360°.
- Should have facility for coarse advance with the help of side-positioned hand-wheel.
- The balanced hand wheel should lock at any position and should ensure ergonomic and safe sectioning.
- Should have trim function in 4 adjustable steps of 10 µm each.
- Should generate acoustic signal for end position of specimen movement.
- Should have automatic retraction on return stroke.
- The ready-to-use main unit should be supplied with:
    - Universal cassette clamp.
    - Round specimen clamp.
    - Disposable blade holder.
    - 5 packets of low-profile blades.
    - Standard knife carrier.
    - 2 tungsten carbide knives (wedge profile), 16 cm with case.
    - 6 needles.
    - Should be provided with standard tools, lubricant, etc. and set of 6 flat brushes, 6 round brushes and 6 forceps.
    - Section waste tray.
- Should be provided with 3 year warranty followed by CMC for 5 years.
- Should have 95% uptime with penalty of Rs.5000/- per day after 24 hours of complaint.
- Rates of high and low profile blades, Tungsten carbide knife and all consumables (e.g. oil, cassettes, moulds, etc.) to be fixed for eight years in the financial bid.

Item No. 15 : Technical Specification for blood chemistry Auto analyzer

- -Fully automated, random access system
- -Truly **Open system** (All channels should be open or to be opened at the cost of supplier) capable of performing routine and special chemistries with user definable applications **(photometry and turbidimetry)**
- -Throughput**>200 tests/hr** without ISE
- -60-plus on-board sample positions with **facility for continuous loading.**
- -**STAT facility** indicating number of positions

- -Facility of usage of primary tubes for sampling
- -Facility for real time monitoring of work-list
- -Pre-and post-dilution facility
- -30-plus reagent positions with facility for on-board cooling.
- -Real time monitoring of reagents with low dead-volume
- -Typical reaction volume should be <250 µl
- -Stainless steel dispenser tips with capacitive level sensor
- -Maintenance free ceramic piston-based dispensing
- -Incubation temperature 37^0C
- -Quartz halogen lamp
- -Grating/interference filters-based photometer with multi wave-length option in the spectral range 340-670-nm
- -Minimum absorbance range 0-2.5A
- -Reusable/disposable cuvettes of good UV-VIS optical quality
- -Silicone photodiode photometric detection system.
- -On-board washing with installation of de-ioniser by the supplier/Disposable cuvettes.
- -QC check for cuvettes after on-board washing
- -Cuvette blank correction before every measurement
- -Fluidic system equipped with air bubble detection technology
- -Recurrent annual cost of washing solutions, consumables and maintenance of de-ionizer plant (excluding cost of cuvettes) considering work-load of 400 tests/day for 300 working days in a year.
- -Cost of semi-disposable/permanent cuvettes and frequency of their replacement in terms of numbers of tests. Whether single cuvette can be replaced
- -If using disposable cuvettes, mention cuvette-cost
- The rates of above consumables/solutions/cuvettes shall be freezed for subsequent eight years.
- -Data management with latest multitasking window-based computer having graphical user interface , hardware interface (RS- 232 serial port), LIS interface with necessary accessories.
- -Capable of internal quality control management
- -Compatible online UPS with at least 1-hour back-up
- -Distilled/de-ionized water consumption
- -List of all accessories and consumables to be supplied with the equipment
- -Imparting training to laboratory personal at the site of installation
- -Warranty of 3 years and CMC later on with guarantee of keeping spares for 5 years.

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